**LESSON PLAN**

**Name:** Jessica Torres **Date:** 11/14/11

**Subject:** Science  **Grade Level:** 6 **Length of Lesson:** 50 minutes

**Lesson Plan Title**: Weather Instruments

**Content Standard:** Standard 8 Atmosphere

**Materials & Resources:** Thermometer Formative Assessment Probe, Weather Instrument Power Point, Student Interactive Notebook, Jeopardy weather instrument game. For introduction: Thermometer, barometer, and rain gauge.

# PLANNING

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| **Unit Goal(s):**  GLE 0607.8.4 Analyze meteorological data to predict weather conditions. |
| **Learning Objectives:**  TLW gain the knowledge to identify four tools that are used to predict the weather.  TLW be able to explain what each tool does and how it predicts the weather conditions.  **0607.8.6** Use data collected from instruments such as a barometer, thermometer, barometer, and anemometer to describe local weather conditions.  **SPI 0607.8.4** Interpret meteorological data to make predictions about the weather. |
| **Enduring Understandings:**   * CONCEPT(S):   Identify weather instruments that predict the weather.  Define weather instruments that predict the weather.  Identify a thermometer and explains that it measures temperature.  Identify a wind vane and explain that it measures the direction of the wind.  Identify an anemometer and explain that it measures wind speed.  Identify a barometer and explain that it measures air pressure.  Identify a rain gauge and explain that is measures the amount of rainfall.   * ESSENTIAL QUESTIONS:   How do these tools help us daily?  Which weather instrument is the most important to meteorologist?  What would happen if we could not predict the weather? |
| **Interdisciplinary Connections:**  English/Language Arts  Standard 2 – Communication  **GLE 0601.2.8** Participate in work teams and group discussions.  Standard 3- Writing  **GLE 0601.3.1** Write in a variety of modes for different audiences and purposes |

# INSTRUCTION

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| **INTRODUCTION or Anticipatory Set Time: 5 minutes**  As the students enter the room they pick up the Thermometer formative assessment probe. The teacher reads the question and the responses. The teacher allows them a minute to think about this and then the teacher states each answer and asks them to raise their hand if they agree with that statement. As a whole class we talk about the correct answer. Next, show the class actual weather tools and have them guess what each one is. The thermometer, barometer, and rain gauge. Ask if anyone has ever encountered any of the weather tools and if so, what do they think it does. |
| **BODY (Activities & Practice)** |
| **Activities**  **Time: 25 minutes**  The teacher will use the weather tools power point that is provided to teach the bulk of the lesson. Each slide has a weather tool on it, the definition and the picture. We will discuss what they know about each one and how it works as we go through each tool. There are five total tools: thermometer, barometer, anemometer, wind vane, and rain gauge. I believe that some will be brand new to them: the barometer and the anemometer. Some of them might be familiar to them such as: the wind vane and the rain gauge, and one that the all know: thermometer. As I go over the power point, the students will be taking cornell notes in their interactive notebooks. At the end the teacher will ask for any questions and then move on to the jeopardy game. |
| **Practice/Assessment** **Time**: 15 minutes  After the power point the students will play a jeopardy game that was created about weather tools and what they measure. The students sit at round tables, which will serve as their group for this game. After competing in their groups, TLW be able to identify and define each of the five weather tools.  Section 4 Review to be worked on at the end of class and the rest for homework. |
| **CLOSURE Time: 5 minutes**  We will review the weather tools that were learned and how they are used.  The teacher will lead discussion and review the essential questions.  How do these tools help us daily?  Which weather instrument is the most important to meteorologist?  What would happen if we could not predict the weather? |

**ASSESSMENT**

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| **Evaluation:**  Informal: The students will participate in the Jeopardy game and they also filled out cornell notes during the power point.  Formal: At the end of the lesson the teacher will pass out the Section 4 review worksheet. They will have a little time in class to finish this in class, and they will finish the rest at home. The students will have a quiz at the end of the week and they will be asked to identify the different weather tools that were discussed. |

**Alternative and/or Supplemental Activities/Extensions:**

**Reteaching:**

If any students are having trouble with identifying the weather tools, the teacher will go back and review and also show that student real life weather tools using what they have or online pictures. For extension, have the student make a weather tool. An easy tool to make is a wind vane. The following website tells you how to make one with just a few easy materials.

[Wind Vane Instructions](http://www.ciese.org/curriculum/weatherproj2/en/docs/windvane.shtml)

**References**: Classroom teacher provided power point and I made the game, which I linked on the wiki.

"Make and Use a Wind Vane to Determine Wind Direction." *The Center for Innovation in Engineering*

*and Science Education*. Web. 29 Nov. 2011.

<http://www.ciese.org/curriculum/weatherproj2/en/docs/windvane.shtml>.